

In-hospital mortality, 30-day readmission, and length of hospital stay after surgery for primary colorectal cancer: A national population-based study

Eur J Surg Oncol. 2017 Jul;43(7):1312-1323.

Pucciarelli S, Zorzi M, Gennaro N, Gagliardi G, Restivo A, Saugo M, Barina A, Rugge M, Zuin M, Maretto I, Nitti D

INTRODUCTION. The simultaneous assessment of multiple indicators for quality of care is essential for comparisons of performance between hospitals and health care systems. The aim of this study was to assess the rates of in-hospital mortality and 30-day readmission and length of hospital stay (LOS) in patients who underwent surgical procedures for colorectal cancer between 2005 and 2014 in Italy.

METHODS. All patients in the National Italian Hospital Discharge Dataset who underwent a surgical procedure for colorectal cancer during the study period were included. The adjusted odd ratios for risk factors for in-hospital mortality, 30-day readmission, and LOS were calculated using multilevel multivariable logistic regression.

RESULTS. Among the 353 941 patients, rates of in-hospital mortality and 30-day readmission were 2.5% and 6%, respectively, and the median LOS was 13 days. High comorbidity, emergent/urgent admission, male gender, creation of a stoma, and an open approach increased the risks of all the outcomes at multivariable analysis. Age, hospital volume, hospital geographic location, and discharge to home/non-home produced different effects depending on the outcome considered. The most frequent causes of readmission were infection (19%) and bowel obstruction (14.6%).

CONCLUSIONS. We assessed national averages for mortality, LOS and readmission and related trends over a 10-year time. Laparoscopic surgery was the only one that could be modified by improving surgical education. Higher hospital volume was associated with a LOS reduction, but our findings only partially support a policy of centralization for colorectal cancer procedures. Surgical site infection was identified as the most preventable cause of readmission

FULL TEXT PER GLI UTENTI REGISTRATI ALLA RIVISTA

[http://www.ejso.com/article/S0748-7983\(17\)30369-4/fulltext](http://www.ejso.com/article/S0748-7983(17)30369-4/fulltext)